

WHAT IS CLAIMED IS:

1. An optical recording medium having a wobbled groove and pits formed at a pre-set interval in an area between turns of the wobbled groove.

2. The optical recording medium as claimed in claim 1 wherein the wobbling frequency  $f_w$  and the pit frequency  $f_p$  satisfy the relation

$$M f_w = N f_p$$

where M and N are integers.

3. The optical recording medium as claimed in claim 1 wherein the pits are formed at substantially constant wobbling positions.

4. The optical recording medium as claimed in claim 3 wherein the pits are formed at substantially minimum wobbling positions.

5. The optical recording medium as claimed in claim 3 wherein the pits are formed at substantially maximum wobbling positions proximate to a neighboring turn of the groove.

6. The optical recording medium as claimed in claim 1 wherein the pits are formed radially in continuation between neighboring turns of the groove.

7. The optical recording medium as claimed in claim 1 wherein wobbling is of a sole frequency.

8. The optical recording medium as claimed in claim 1 wherein the sector information is recorded by the pits.

9. The optical recording medium as claimed in claim 8 wherein said pits have sync pits and/or address pits.

10. The optical recording medium as claimed in claim 1 wherein the sector information is recorded in the groove by modulating the wobbled signal.

11. The optical recording medium as claimed in claim 10 wherein the sector information includes the synchronization information and/or the address data.

12. The optical recording medium as claimed in claim 8 wherein the sector information is recorded in the groove by modulating the wobbled signal.

13. The optical recording medium as claimed in claim 12 wherein the sector information includes the synchronization information and/or the address data.

14. The optical recording medium as claimed in claim 12 wherein the sector information of the wobbled signal is at a constant positional relation with respect to the sector information of the pits.

15. The optical recording medium as claimed in claim 14 wherein the synchronization signal included in the sector information of the wobbled signal is ahead of the sector information of the pits in the signal reproducing direction.

16. The optical recording medium as claimed in claim 15 wherein the position of the synchronization signal included in the sector information of the wobbled signal is within one pit period of the sync pits.

17. A method for recording and/or reproducing signals to an

optical recording medium having a wobbled groove and pits formed at a pre-set interval in an area between turns of the wobbled groove, comprising

controlling rotation of the optical recording medium by a wobbled signal from the groove and

detecting the position on the optical recording medium of a recording signal by pit signals detected from the pits.

18. The recording and/or reproducing method for the optical recording medium as claimed in claim 17 wherein the wobbled signal and the pit signals are simultaneously read out by a sole beam spot by the push-pull method.

19. A recording and/or reproducing apparatus comprising:

an optical recording medium having a wobbled groove and pits formed at a pre-set interval in an area between turns of the wobbled groove;

detection means for detecting a wobbled signal from said groove; and

detection means for detecting pit signals from the pits;  
wherein

rotation of the optical recording medium is controlled by the wobbled signals detected from the groove and wherein the position on the optical recording medium of the recording signal is detected by the pit signal detected from the pits.

20. The recording and/or reproducing apparatus as claimed in claim 19 wherein the detection means for detecting the wobbled

signal from said groove and the detection means for detecting pit signals from the pits are detection means for simultaneously reading out the wobbled signal and the pits by a sole beam spot by the push-pull method.